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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,646

06/25/2003

Albert Maurer

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2748

7590

06/19/2006

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EXAMINER

WILLOUGHBY, TERRENCE RONIQUÉ

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,646

Applicant(s)

MAURER ET AL.

Examiner

Terrence R. Willoughby

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant amendment filed on March 31, 2006 has been entered. Accordingly claims 1,9, and 13 have been amended and no additional claims have been canceled. No new claims were added. Claims 1-4, 6-10, and 12-14 remain pending in this application. It also included remarks/arguments.

Claim Objections

1. Applicant is advised that should claim 7 be found allowable, claim 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).
2. Claims 7 and 8 are objected to in line 2 of the claim as "voltageless" is not a real word. Everything has a potential with respect to everything else. You can make two objects of equal potential and thereby have no voltage difference between the two objects, but the word voltageless has no accepted meaning. The examiner also objects to the phrase, "zero point correction" in line 3 means as it is unclear?
3. Claims 7 and 8 are objected to because of the following informalities: the words "voltageless", "currentless" and "chargeless" are misspelled. Appropriate correction is required.
4. Claims 12 and 13 are objected to because of the following informalities: the word "effected" should be "affected." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3, 9, 10, 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Regarding claims 3 and 10, it is unclear how the two coils are grouped together into one single common coil. It has already been stated that the two coils are on opposite sides of the transport belt, therefore how can the two coils be grouped together.
7. Claim 9 recites the limitation "the transport direction" in line 9 of the claim. There is insufficient antecedent basis for this limitation in the claim.
8. Regarding claim 12, it is unclear whether an object is put through a transport path multiple times or if the cycled manner is in a start and restart manner.
9. Regarding claim 13, the phrase "start-stop" should be rewritten as "start and restart".
10. Regarding claim 14, a single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990), a claim directed to an automatic transmission workstand and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 14 is rejected based on the theory that the claim is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* at 1551. See MPEP 2173.05 (P), II.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-4, 6-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steingroever (US 4,058,763) in view of Steingroever et al. (US 4,384,313).

With respect to claims 1, 9 and 14 Steingroever discloses the claimed method for demagnetizing objects (Fig.2 elements 6,7) between two coils lying on opposite (Fig. 2 element 2) longitudinal sides of transport path relative to one another (Fig. 3 element 19, col. 3, ll. 19-21), wherein the object is located within the region between the coils

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within an alternating field (col. 3, ll. 4-9), and wherein the coils form a single series oscillation circuit which are supplied in a current controlled manner (col. 4, ll. 13-25), and wherein the object is previously treated in at least one pre-treatment station for demagnetizing magnetically hard locations in the object (abstract, ll. 9-12, col. 2, ll. 29-32).

Steingroever does not disclose wherein the object is located within the region between the coils within an alternating field for a staying of time of a certain duration.

However, Steingroever et al. discloses a process for demagnetizing components by alternating magnetic fields of vary intensity (abstract) in which he discloses wherein the object is located within an alternating field (col. 1, ll. 17-22) for a staying of time of a certain duration (Figs 5 and 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Steingroever demagnetizing apparatus to include wherein the object is located within an alternating field for a staying of time of a certain duration for the purpose of calibrating permanent magnets to a particularly working point and lowering the intensity of the alternating field.

With respect to claim 2, Steingroever in view of Steingroever et al. discloses the method according to claim 1, however both references do not disclose the claimed said method wherein the staying time over the duration of the cycle lasts between 20 and 500 periods. However, it has been decided that where the general conditions of the claim are disclosed in the prior art, it is not inventive to discover the optimum or workable range by routine experimentations. In re Aller, 220F. 2d 454,456, 105 USPQ

233,235 (CCPA, 1955). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have known that the duration time cycle depends on hardness and thickness of the demagnetizing object. Therefore, the duration of time it takes to demagnetize an object can be predetermined and set by the user at his or her own discretion.

With respect to claims 3 and 10, Steingroever in view of Steingroever et al. discloses the method according to claims 1 and 9, wherein the two coils are grouped together into single common coil (Steingroever et al., Fig. 2 elements 2, col. 2, ll. 47-50 and 55-56) and wherein the alternating field is produced within the coil (Steingroever et al., abstract, ll. 1-7, col. 3, ll. 4-9).

With respect to claim 4, Steingroever in view of Steingroever et al. discloses the method according to claim 2, wherein the alternating field of the series oscillation circuit is reduced down from a nominal current to an end current (Steingroever et al., col. 1, ll. 46-49) by way of a control or ramp function which is programmed in the inverter (Steingroever et al., col. 2, ll. 48-66).

With respect to claim 6, Steingroever in view of Steingroever et al. discloses the method according to claim 4, wherein the demagnetization curve (Steingroever et al., Figs. 5 and 6) is influenced by additional supply of the series oscillation circuit by way of feeding with rectangular impulses (Steingroever et al., Fig. 7) by the separate current control (Steingroever et al., col. 2, ll. 48-66).

With respect to claim 7, Steingroever in view of Steingroever et al. discloses the method according to claim 4, wherein after completion of the demagnetization

procedure, the series oscillation circuit is made voltageless, currentless and chargeless by way of zero point correction (Steingroever et al., col. 2, ll. 53-66).

With respect to claim 8, Steingroever in view of Steingroever et al. discloses the method according to claim 4, wherein after completion of the demagnetization procedure, the series oscillation circuit is made voltageless, currentless and chargeless by way of zero point correction (Steingroever et al., col. 2, ll. 53-66).

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steingroever in view of Steingroever et al. as applied to claims 1-4, 6-10 and 14 above, and further in view of Schergen et al. (US 4,360,854).

With respect to claim 12, Steingroever in view of Steingroever et al. discloses the device according to claim 9.

Steingroever in view of Steingroever et al. does not disclose wherein the transport of the objects on the transport belt is effected in a cycled manner.

Schergen et al. discloses demagnetizing variable frequency (see abstract), in which he teaches wherein the transport of the objects on the transport belt is effected in a cycled manner (abstract, ll. 5-7).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Steingroever in view of Steingroever et al. by the teaching of Schergen to include wherein the transport of the objects on the transport belt is effected in a cycled manner to improve demagnetizing objects of various sizes by selectively predetermining the magnetizing forces to provide longer and shorter periods of reversals, in a given cycle, according to the hardness or softness of the objects.

With respect to claim 13, Steingroever in view of Steingroever et al. and further in view of Schergen discloses wherein the transport of the objects on the transport belt effected in a cycled manner is performed in a start-stop way (Fig. 8 elements 156, 174 and 177, abstract, ll. 11-15).

Response to Arguments

Applicant's arguments with respect to claims 1-4, 6-10, and 12-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Willoughby whose telephone number is 571 272-2725. The examiner can normally be reached on Monday - Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 ext 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRW
June 11, 2006



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